Iowa Farm Science

Volume 8 | Number 2 Article 9

8-1953

Farm Income and Costs - 1952

H. B. Howell
Iowa State College

FARM INCOME AND COSTS - 1952

An analysis of the business records of 999 Iowa farms shows us some of the trends in production and income which occurred last year. The records also furnish standards you can use to judge the efficiency of your own farm business.

by H. B. Howell

FEEDING margins, crop yields and operating expenses all played a major role in the drop in net farm income and the wide differences in income among farms in 1952.

Last year 999 Iowa farmers kept records of their farm business in cooperation with the Iowa State College Agricultural Extension Service. Most of these records come from above-average farms—larger in acreage and volume of business and having higher net incomes than average for the state. Still, the records from these farms indicate the trends in production and income that occurred in 1952. Also, they furnish some standards by which we can judge the efficiency of other farm businesses.

The records on the 999 farms were kept on the inventory or accrual basis. On rented farms, the net income includes the combined net income of both operator and landlord—that is, income to the entire farming unit.

Incomes Dropped

Comparing 1952 with 1951, net incomes dropped 15 percent and were 33 percent below the recent high of 1950. Farm costs increased 2 percent over 1951 and were 9 percent above the 1950 level. Table 1 shows the trends on income, costs and resources used on the farms keeping records in cooperation with Iowa State College since 1940. Changes in livestock income over feed costs and corn yields also are shown.

Two factors highlighted the farm business picture in 1952. Corn yields in Iowa reached a new record high. Yields for the 999 farms averaged 75 bushels per acre—11 bushels above the state average for 1952 and 23 bushels over the 1951 average for the 988 farms that kept records in cooperation with the college then.

The second major factor was the narrowing of the feeding margin. For each $100 of feed fed in 1952, the 999 farms had a livestock increase of $114 — down from a level of $145 in 1951. The 1952 margin is the third lowest margin recorded since state farm summaries were first prepared in 1927. The lowest years were 1931 with an average $85 livestock increase per $100 of feed fed and 1932 with an average $101 livestock increase per $100 of feed fed.

Average net farm income on the record-keeping farms dropped from $8,958 in 1951 to $7,631 in 1952 and was accompanied by a rise in expenses from $8,236 to $8,392. In addition to these increased cash costs, investment in machinery and equipment used in the farm business went up from an average of $7,000 in 1951 to

Table 1

Farm Income and Cost Trends—1940 to 1952

	1952	1951	1950	1940
Gross profits (production in dollars)	$16,023	$17,194	$19,080	$ 5,730
Expenses	8,392	8,236	7,720	2,430
Net farm income	$ 7,631	$ 8,958	$11,360	$ 3,300
Charges for equity in land, capital and operator and family labor	5,012	5,024	4,730	1,800
Earnings for management (management return)	$ 2,619	$ 3,934	$ 6,630	$ 1,500
Resources used:				
Feed and livestock	$21,200	$20,100	$15,400	$ 7,400
Machinery and equipment	7,800	7,000	6,300	2,600
Labor-months hired operator and family	19 mo.	20 mo.	21 mo.	24 mo.
Land	252 A.	251 A.	250 A.	238 A.
Efficiency:				
Livestock income per $100 of feed fed	$ 114	$ 145	$ 181	$ 150
Corn yields per acre	75 bu.	52 bu.	56 bu.	60 bu.
Number of farms included	999	988	968	830

H. B. HOWELL is associate professor of farm management and in charge of farm record summary analysis.

$7,800 in 1952. This increase in machinery and equipment investment was partially offset by an average reduction in labor of 1 month per farm from 1951.

Farms Differ

Many of the changes in income from year to year are caused by factors or events outside of farm fences and are factors that the individual operator can do little about. Weather, general economic conditions and international incidents are examples. On the other hand—and of more importance in studying the problem of profitable farm operations—are the differences between farm organization, size, costs and income in the same year. Tables 2, 3 and 4 point up these differences in several ways.

Table 2 shows the farms grouped according to levels of income, table 3 shows them grouped by size, and table 4 groups them by areas of the state.

Efficiency . . .

The job of running a successful farm business isn't just one of getting high production per animal or per acre. It's a job of using the land, capital and labor that an operator controls in a combination that gives the maximum net income from all resources used—a job of getting top income from all enterprises rather than from only one or two. This is good management or efficient farm operation.

Table 2 indicates some of the major differences between the "high-profit" one-third and the "low-profit" one-third of the 999 farms. Management return—which is what is left after charges for land rent and interest on working capital and for a wage for operator and family labor—averaged $6,739 for the 333 high-profit farms and a minus $1,835 for the 333 low-profit farms. This difference of $8,574 is equal to a good income on any farm.

The greatest single variation between the two groups of farms was in the gross profits per man—although the high group avaraged only 9 more total acres per farm than the low group. Gross profit represents the production of the farm in terms of dollars. The high farms averaged $12,630 in gross profits per man as compared with $7,080 for the low farms. No one of the different factors that contributed to the difference in efficiency per worker seems great considered alone, but in total they add up to a difference of nearly 80 percent in production per worker.

Table 2 shows an average of 9 bushels more corn per acre, ½ more pig weaned per litter, $62 more income per cow, 10 cents more income per hen and $19 more beef income per head on the high-profit farms as compared with the low-profit group. The high-profit farms handled only 15 more crop acres per man and had $2 less machinery and power cost per acre than the low-profit farms.

When the livestock enterprises are combined on the individual farms and the results measured in terms of livestock increase per $100 of feed fed, real differences between the high and low groups show up. The high group had a feed return of $129 for every $100 of feed fed, while the low group showed only $96 income from livestock for every $100 of feed fed—a loss of $4 on each $100. The returns on feed fed measure not only the efficiency of production but also the selection of combinations of livestock enterprises and ability to market.

With narrower feeding margins and increasing operating expenses, controlling farm costs is more important during recent years of rising farm prices. Notice the higher crop acres per man and lower machinery costs of the high-profit farms.

Size Differences . . .

Table 3 shows the trends in income and costs by size of farms. With a favorable crop year in 1952 and with lower-than-1951 but still good profits in agriculture, the larger farms made more money than the smaller ones.

As the size of business increased, the gross profits per man and the crop acres per man increased. The larger farms also had a much lower machinery and power cost per rotated acre—dropping from $26 per acre on the farms averaging 110 acres in size to $17 per acre on the farm averaging 486 acres. But the gross value of crops per acre and the returns per $100 of feed fed were higher on the smaller farms. Last year was a poor beef year and, since the larger farms handled more beef cattle but did less dairying and poultry raising than the smaller farms, incomes changed accordingly.

The increased cost of labor and the accompanying mechanization that has taken place in farming

Table 2

Management Analysis of 999 Well-Managed Iowa Farms, 1952[1]

	Av. of all 999 farms	Av. of 333 high-profit farms	Av. of 333 low-profit farms
Net farm income	$ 7,631	$12,269	$ 3,249
Management return	2,619	6,739	1,835
Land use:			
Corn yields per acre	75 bu.	80 bu.	71 bu.
Gross value of crops per acre	$ 73	$ 79	$ 68
Livestock income per $100 of feed fed	$ 114	$ 129	$ 96
Pigs weaned per litter	6.8	7.0	6.5
Dairy income per cow	$ 220	$ 250	$ 188
Poultry income per hen	$ 5.60	$ 5.70	$ 5.60
Beef income per head	$ 49	$ 59	$ 40
Machinery and labor:			
Crop acres per man	118 A.	115 A.	100 A.
Gross profits per man	$10,141	$12,630	$ 7,080
Machinery and power cost per rotated acre	$ 21	$ 20	$ 22
Income-cost ratios:			
Gross profit per $1 cost	$ 1.91	$ 2.39	$ 1.38
Net income per $1 cost	$ .91	$ 1.39	$ .38
Acres per farm	252 A.	262 A.	253 A.

[1]Farms grouped so that total acres of land not a major factor.

has given some advantage to the larger farms in terms of lower power and machinery investment and costs per acre. Still, larger farms call for more skill and more working capital and carry more risk than do smaller farms. The best-size farm for any individual is determined largely by his ability to manage additional resources. A poorly managed large farm may make less money than a well-managed smaller farm.

Table 3

Comparisons of Production, Income and Costs Based on Size of the Farms

	0 to 139 A.	140 to 199 A.	200 to 259 A.	260 to 359 A.	360 A. and over
Capital, land and labor used:					
Livestock and feed	$ 9,500	$14,900	$19,900	$23,900	$39,400
Machinery and equipment	$ 4,400	$ 6,100	$ 7,900	$ 8,800	$11,300
Land, acres	110	165	227	306	486
Labor, months	13	15	18	22	29
Financial returns:					
Net farm income	$ 4,055	$ 5,552	$ 6,747	$ 8,695	$11,386
Management return	$ 793	$ 1,540	$ 2,047	$ 3,140	$ 4,118
Source of income and costs:					
Value of feed produced	$ 6.033	$ 9,150	$12,078	$15,932	$23,180
Livestock income over feed costs	$ 1,769	$ 1,910	$ 1,949	$ 2,238	$ 1,618
Other income	$ 481	$ 657	$ 839	$ 933	$ 2,000
Gross profits	$ 8,283	$11,717	$14,866	$19,103	$26,798
Expenses	$ 4,228	$ 6,165	$ 8,119	$10,408	$15,412
Net farm income	$ 4,055	$ 5,552	$ 6,747	$ 8,695	$11,386
Production:					
Crops, acres	76	117	159	216	319
Litters of pigs	20	24	28	36	43
Cows milked	7	6	6	6	6
Other cattle	26	51	81	104	177
Hens	128	121	113	109	96
Value of livestock production	$ 9,494	$12,101	$14,972	$19,436	$25,013
Value of feed fed	$ 7,725	$10,191	$13,023	$17,198	$23,395
Income over feed costs	$ 1,769	$ 1,910	$ 1,949	$ 2,238	$ 1,618
Efficiency:					
Gross value of crops per crop acre	$ 75	$ 75	$ 74	$ 71	$ 70
Returns per $100 feed fed	$ 123	$ 119	$ 115	$ 113	$ 107
Machinery and power costs per rotated acre	$ 26	$ 23	$ 21	$ 19	$ 17
Gross profits per man	$ 7,669	$ 9,374	$ 9,911	$10,438	$11,073
Crop acres per man	70	94	106	118	132
Number of farms:	91	287	255	222	144

Table 4

Variation in Farm Business by Areas of the State

	Area 1	2	3	4	5	6	7
Net farm income	$8,486	$8,491	$9,251	$6,507	$8,236	$5,146	$6,807
Management return	$3,546	$2,819	$4,212	$1,733	$1,840	$ 944	$1,226
Acres per farm	244	241	269	248	253	269	248
Crop production:							
Percent of land in harvested crops	71	68	78	65	77	53	68
Acres of corn	90	88	112	76	94	60	86
Corn yield per acre (bu.)	81	88	75	71	75	60	73
Livestock production:							
Litters of pigs	33	42	36	25	33	16	24
Cows milked	6	6	5	11	4	5	5
Hens	99	63	107	168	177	93	129
Number of cattle	90	98	93	69	144	48	110
Labor, months	19	21	21	20	20	17	18

Area Differences . . .

Land resources and weather conditions aren't uniform over the state, with resulting differences in systems of farming. Table 4 summarizes the variation in systems of farming and production as found in 1952.

Net farm income was the highest in central Iowa (area 3 or the cash grain area), which had the highest percent in harvested crops and the largest acreage of corn per farm. Corn yields were highest in southeastern Iowa (area 2 or the eastern livestock area) averaging 88 bushels of corn per acre on the 144 farms located there. This area also had the most litters of pigs per farm. Area 4 (northeast dairy area) had nearly twice as many milk cows per farm as any other area, and area 5 (northwest livestock area) had the most hens and beef cattle per farm.

Performance Standards . .

Even though the farms included in the record summary are above the state average in size and production, they can serve as criteria or guideposts for sizing up the standards of other farm businesses. How did your own gross profit per worker, size of business, economy in power and machinery, crop yields, livestock production and feeding efficiency line up with these farms in 1952? This type of an examination of your own farm business is the place to start in figuring out how to make it more efficient and to get the most income from the resources you have available.